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EXAMINER
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REID, MICHAEL ROBERT

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MICHAEL J. DAVIS,  
KERRY L. DEWITT,  
STEVEN A. WORTMANN,  
and WILLIAM J. REILLY

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Appeal 2015-004595  
Application 13/790,696  
Technology Center 3700

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Before JAMES P. CALVE, WILLIAM A. CAPP, and  
FREDERICK C. LANEY, *Administrative Patent Judges*.

CALVE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the final rejection of claims 1–12. *See* Br. 2–14. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

### CLAIMED SUBJECT MATTER

Claim 1, the sole independent claim on appeal, is reproduced below.

1. A valve, comprising:
  - a housing comprising a sidewall and first and second oppositely disposed end caps attached thereto, said sidewall and said end caps defining a chamber;
  - an inlet positioned in said first end cap providing fluid communication to said chamber;
  - a plurality of outlets positioned in said sidewall and providing fluid communication to said chamber;
  - a substantially solid body positioned within said chamber, said body being rotatable relatively to said housing about an axis coaxially aligned with said inlet;
  - a void space positioned wholly within said body, said void space having an intake port coaxially aligned with said inlet and an exhaust port alignable with any one of said plurality of outlets positioned in said sidewall upon rotation of said body.

### REJECTIONS

Claims 1, 2, and 4–6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kindersley (US 4,049,105, iss. Sept. 20, 1977).

Claim 3 is rejected under 35 U.S.C. § 103(a) as unpatentable over Kindersley.

Claims 7–10 are rejected under 35 U.S.C. § 103(a) as unpatentable over Kindersley and Eminger (US 5,727,595, iss. Mar. 17, 1998).

Claim 11 is rejected under 35 U.S.C. § 103(a) as unpatentable over Kindersley and Okabe (US 2010/0032033 A1, pub. Feb. 11, 2010).

Claim 12 is rejected under 35 U.S.C. § 103(a) as unpatentable over Kindersley, Okabe, and Gibb (US 7,086,131 B2, iss. Aug. 8, 2006).

## ANALYSIS

*Claims 1, 2, and 4–6 as anticipated by Kindersley*

Resolution of this rejection turns on claim construction. Appellants argue that “substantially solid body” “specifies the physical characteristic of the interior of the body, i.e., solid versus hollow.” Br. 5. Appellants cite their Figure 1, reproduced below, in support of this argument. *See id.*

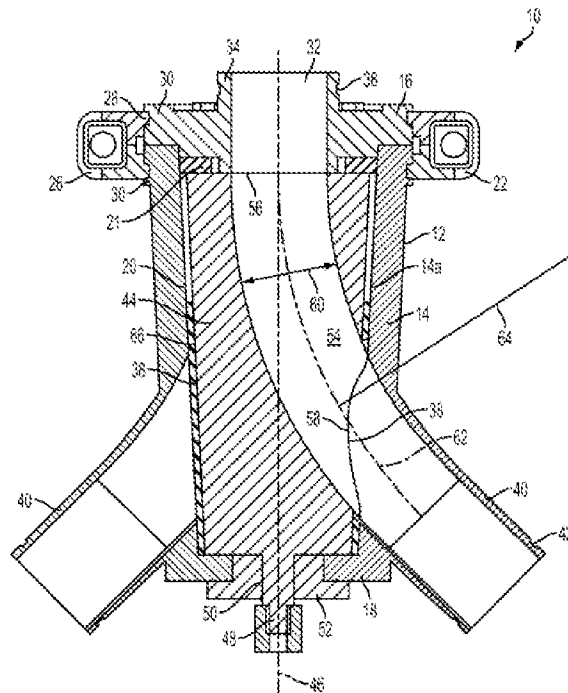


FIG. 1

Figure 1 is a longitudinal sectional view of the claimed diverter valve.

The Examiner takes the position that Figure 1 of Kindersley depicts body 18 of the diverter valve as “substantially solid” because the base and sidewalls of body 18 are solid and have a thickness that prevents fluid from entering and exiting therethrough, rather than being semi-permeable.

Ans. 7. The Examiner also finds that this substantially solid body includes a void space, as claimed, but claim 1 does not claim a ratio of the solid body to the void space. *Id.* at 6–7. Figure 1 of Kindersley is reproduced below.

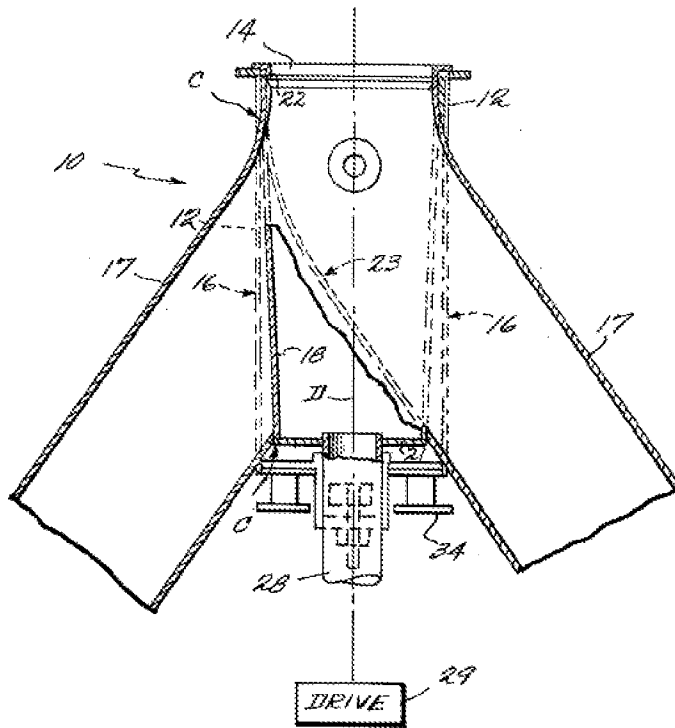


Fig. 1

Figure 1 of Kindersley is a side sectional view of an exemplary valve.

We interpret “substantially solid body” in claim 1 to mean an element that is primarily solid versus gas or liquid and essentially devoid of cavities or hollow spaces, except for “a void space positioned wholly within said body.” This interpretation is consistent with Appellants’ Specification, which shows the “substantially solid body 44” in Figure 1 with diagonal lines in contrast to void space 54 that extends through body 44. Spec. 6–7. Appellants disclose that the use of a substantially solid body 44 with a void space 54 permits the valve to withstand both high and internal operating pressures and also provides a long life when used to divert fluids containing abrasive particulate matter” and “acts as a sacrificial surface having a long wear life due to its bulk.” *Id.* at 7.

The claim language illustrates this distinction by reciting the body as being “substantially solid” and including “a void space positioned wholly within said body.” Thus, claim 1 distinguishes between the body, which is substantially solid, and the “void space,” which is positioned within this substantially solid body.

In contrast to this arrangement, Kindersley discloses a body (inner element 18) that is substantially hollow. Kindersley, Fig. 1. The Examiner does not dispute Appellants’ characterization of element 18 as being hollow. *See* Ans. 6. The fact that element 18 may be made of metal and include a solid base and sidewalls does not alter the fact that element 18 is described as a truncated cone shape and illustrated with a hollow interior. Kindersley, 2:17–22, Fig. 1. Kindersley also discloses a void space (diverter 23) within element 18. Kindersley illustrates hollow diverter 23 in the same manner as truncated cone element 18, i.e., as a cavity or hollow space.

Thus, we do not sustain the rejection of claim 1 or its dependent claims 2 and 4–6.

*Rejections of dependent claims 3 and 7–12*

The Examiner’s reliance on Kindersley, Eminger, Okabe, and Gibb to teach features of dependent claims 3 and 7–12 does not cure the deficiencies of Kindersley as to claim 1, from which these claims depend. Final Act. 4–6; Br. 7–13. Thus, we do not sustain the rejections of claims 3 and 7–12.

DECISION

We reverse the rejections of claims 1–12.

REVERSED